- 16. The patient infusion system of claim 14, wherein said electromagnetic energy communicated between said transceivers is in the infrared spectrum.
- 17. The patient infusion system of claim 13, further comprising a rechargeable battery located in the room and connected to the electric drive motor for providing power to the electric drive motor.
- 18. The patient infusion system of claim 13, wherein the electric drive motor and motor control circuitry are enclosed within the electromagnetic shield.
- 19. The patient infusion system of claim 13, wherein the infusion apparatus control means is adapted to be located at least ten to fifteen feet from the patient.
- 20. The patient infusion system of claim 13, wherein the non-rigid drive connection is comprised of hard brass.
- 21. The patient infusion system of claim 13, wherein the patient infusion apparatus is adapted to be located in close proximity to the patient.
- 22. Amethod of patient infusion for use with a magnetic resonance imaging system, the method comprising the steps of:
  - a) providing patient infusion apparatus having a patient infusion apparatus controller and means operable to inject fluid into a patient;
  - b) positioning the patient infusion apparatus controller away from the patient infusion apparatus to prevent interference in the image, the infusion apparatus controller including at least one electric motor and motor control circuitry; and
  - c) operably connecting the electric motor for controlling the patient infusion apparatus to the patient infusion apparatus with a non-rigid drive connection, the electric motor operating the patient infusion apparatus to infuse media into a patient.
- \$\sqrt{23}\$. A method of patient infusion for use with a magnetic resonance imaging system, the method comprising the steps of:
  - a) providing a room shielded from electromagnetic interference including a viewing window;
  - b) providing a system controller located outside the room;
  - c) providing a patient infusion apparatus including infusion apparatus control means for controlling an infusion operation, the patient infusion apparatus located inside the room; and
  - d) transmitting control signals from the system controller to the infusion apparatus control means through the viewing window.

ogg OT of

AN 6'>

 $\left(\frac{3}{3}\right)^{2}$ 

30

35

40

50